

AIDING THE CARDIAC PATIENT IN INDUSTRY

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IN ANSWER to the challenge "Aiding the Cardiac Patient in Industry," I shall first review certain facts, then explore and recommend ways in which physicians in industry can most effectively exert their helpful influence.

It is estimated that there are in this country about 9,000,000 persons with all types of heart disease. How many of these are engaged in industry or otherwise gainfully employed is not accurately known.

Kresky and Goldwater,¹ in a study of 2,081 patients attending 10 of the New York Heart Association adult cardiac clinics, reported in 1944 that 47 per cent of the males of all ages were employed. Of those whose ages were below 35, the percentage rose to 81. From these figures it can be postulated that there are 5,000,000 persons with heart disease who are performing useful work of some type.

Take coronary occlusion alone, a type of heart disease often encountered among males during their most productive years. Master,² working from samplings of the New York State death certificates for 1942, estimated that there were in the country as a whole about 800,000 attacks of acute coronary occlusion yearly. In the eight years intervening, with improvement of diagnostic techniques, particularly the wider application of unipolar and multiple precordial lead electrocardiography, it is likely, the figure is even higher, perhaps near the 1,000,000 mark. An assumed mortality of 20 per cent would allow 800,000 survivals. If half of the survivors return to work, 400,000 or 500,000 persons with coronary disease are being added yearly (for the period of their survival) to the labor market. Owing to the constant increase of the number of aging persons in the population, the number of cardiac patients in industry can be anticipated to increase further, unless a better understanding of the basic pathologic physiology can be applied, with more success than is now possible, to the prevention of this disease. Although there is promise in the effectiveness of such agents as the antibiotics, used in the treatment of sub-acute bacterial endocarditis, cortisone and ACTH, used in acute rheumatic fever, and the "giant molecules" of the blood phospholipids and their relationship to human

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1. Kresky, B., and Goldwater, L. J.: Occupational Potentialities of Cardiac Patients, *Am. Heart J.* 27:623, 1944.

2. Master, A. M.: Incidence of Acute Coronary Artery Occlusion, *Am. Heart J.* 33:135, 1947.